UNIVERSITY OF ARKANSAS
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Clothes Dryers

In this edition of **E**NERGY **E-T**IPS, we continue our discussion on home appliances with clothes dryers. In the previous edition we discussed clothes washers. Please visit the Energy E-tips website: http://www.arhomeandgarden.org/News/Energy_ETips/energy_etips.htm

As mentioned earlier (in the previous editions), the laundry room can be a big consumer of energy, more than 1,000 kilowatt-hours annually (kWh/yr), and a big producer of unwanted heat and humidity in summer. It makes good sense to think about both the location and the appliances in it if you want to run an energy efficient laundry.

While washers have become more efficient in the past decade, dryers did not change much. Clothes dryers are relatively simple. Their major differences are how they heat the air (using gas or electricity) and how they're programmed to shut off once the load is dry (thermostat or moisture sensor).

Dryers are rated by **Energy Factor (EF)**. An EF rating is somewhat similar to miles per gallon for a car. But, in this case, it is the measure of pounds of clothing per kilowatt-hour of electricity. The federal standard minimum EF for a standard capacity electric dryer is 3.01. For gas dryers, the minimum EF is 2.67. The rating for gas dryers is provided in kilowatt-hours even though the primary source of fuel is natural gas.

Dryness sensors are now offered on many dryers, including some relatively low-priced ones. Thermostat dryers are generally the most basic models. The thermostat determines clothes dryness by measuring the temperature of the exhaust air. However, *Consumer Reports* found that dryers with a moisture sensor recognize when laundry is dry quicker than the units with traditional thermostat. Because they shut off automatically when laundry is dry, they use less energy. Savings in energy are around 15% with a moisture-sensing control and 10% with a thermostat control.

The following clothes dryer tips will help you choose which dryer unit to purchase and while using it.

- **Gas vs. electric dryers:** Gas and electric dryers perform comparably, but gas dryers cost about $50 to $150 more than equivalent electric models. Sales of electric dryers account for about 80 percent of models sold. However, the savings in fuel costs of gas dryers should make up the difference in the long run. An electric dryer requires a 240-volt outlet; a gas dryer requires a gas hookup. If you have both, don't rule out the gas model simply because it costs more. Make sure to compare the operational costs when making that decision.
- **Insist on a moisture sensor:** In the long run, over-drying damages fabrics. Moisture sensors overcome this problem by switching off dryers once the laundry is dry. Sensors are now

common on most dryers. Whether a specific model has a moisture sensor or a thermostat, it might not be obvious from labeling or controls. So, try to check the literature and visit the manufacturer's website.

- **Don't get hung up on capacity:** Differences in dryer capacity (extra large, super, and super plus) aren't meaningful for everyday use. Most full-sized dryers can hold a typical wash load. Over-sized dryers use more energy which can be an unnecessary burden on the energy bill.
- **Start in the middle:** Using automatic settings is preferred to manual timed ones. When using an automatic setting, set the control to the midpoint and raise or lower it as needed. Using high settings routinely wastes energy and harm fabrics. Use the Less Dry setting leave clothing damp for ironing.
- **Get a quiet dryer for living areas:** If your dryer will be near the kitchen or a bedroom, look for a model judged very good or excellent for noise.

Where should the laundry area be located?

If possible, try to avoid putting the washer and dryer in spaces that are heated or air-conditioned. The dryer vent will allow warm, humid outside air to enter the home in summer and cold air to enter in the winter. And both the dryer and washer will make your air conditioner work harder because of the heat and moisture produced during washing and drying cycles. If you do have a conditioned laundry room, install a closable fresh-air intake vent to the dryer along with a closable dryer exhaust vent. These vents will keep unconditioned outdoor air from coming in and keep conditioned air from going out when the dryer is off. Try to have as short and straight a vent duct to the outside as possible, and make sure the duct is made of smooth metal. Flexible vinyl duct should be avoided because it restricts airflow, can be crushed, and may not stand up to the high temperatures of the dryer.

What should I look for with regard to energy efficiency in new clothes dryer?

Energy Star does not label clothes dryers because most models use similar amounts of energy, with little difference between models. However, they recommend frequent cleaning of lint filter (sheets), and owning dryers with sensors, for better energy savings.

References:

- Energy Star Website: http://www.energystar.gov
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- Nasty Black Mold on Door Gasket? HE Washer Cleaning Directions
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- Laundry Tips & Trickswww.Downy.com/LaundryAdvice

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